# SUMMARY OF THE QUALITY SYSTEMS COMMITTEE TELECONFERENCE AUGUST 19, 1998

The Quality Systems Committee of the National Environmental Laboratory Accreditation Conference (NELAC) met by teleconference on Wednesday, August 19, 1998, at noon Eastern Daylight Time (EDT). The meeting was led by its chair, Mr. Joe Slayton of the U.S. Environmental Protection Agency (EPA). A list of action items is given in Attachment A. A list of participants is given in Attachment B. *The purpose of the meeting was to address some general issues and the approach for handling "detection limits" and "calibration."* 

#### **GENERAL ISSUES**

General discussion topics were as follows:

- Plans for farewell to departing committee members.
- Plans for a meeting in Washington, D.C. between EPA's Environmental Monitoring Management Council (EMMC) and the NELAC Board.
- Plans for a three day meeting in Annapolis, MD in November to discuss detection limits.
- Schedule for next QS meetings: August 25 (1 3 PM EDT) with EPA EMMC, August 26, (12 2 p.m. EDT) to discuss results of meeting with EPA EMMC.

### MEETING WITH EPA EMMC

A meeting with EPA EMMC and the Quality Systems Committee is planned for August 25, 1998, 1 p.m. to 3 p.m. EDT at the Washington Information Center (WIC) at EPA Headquarters in Waterside Mall. No agenda for the meeting has been prepared to date. Also, many of the EMMC members have conflicting meetings on that date and the meeting may have to be postponed. The committee will have a conference call on August 26, noon to 2 p.m. EDT to discuss the results of the meeting with EMMC. If the EMMC meeting is postponed, the committee will use the August 26 meeting to discuss detection and calibration issues and comments on the Quality Systems Standard received since NELAC IV.

### **MEETING IN ANNAPOLIS**

A meeting to discuss issues related to detection limits is being planned for Annapolis, MD. The committee felt that three days would be needed to properly address these issues. Committee members suggested that the second or third week in November would be a time when members have no scheduling conflicts. The chair will explore conference facility availability and send out proposed dates for the meeting.

#### TELECONFERENCE SCHEDULES

Additional teleconference schedules for all NELAC committees are available from the NELAC website.

## **COMMENTS ON CHAPTER 5**

Comments sent to the committee on essential elements of detection and calibration as well as comments received by Mr. Scott Siders were distributed earlier by the chair to members of the committee. The committee was requested to review these items with emphasis on essential performance criteria that should be included in the standard.

Concern was expressed for using "specific" rather than "general" language in the calibration section. Specific language may conflict with instructions of some methods and make acceptance of the Quality Systems Standard difficult for some interests. Use of generic language, as in the current standard, is more acceptable. Language in ISO Standard 32 may be a useful example. In general, where a conflict between the Quality Systems Standard and a given analytical method, the more restrictive requirement should be followed.

The issue of how much information is needed to meet the Section 5.9.4.1.b) requirement to have "Sufficient information shall be recorded to permit reconstruction of the calibration" was discussed. Data from instrument response versus calibration standard sufficient to generate a calibration curve or calibration relationship is needed. Add "relationship" to calibration for clarity.

Language in Sections 5.9.4.3 and 5.9.4.4 is too specific and should be replaced with more generic descriptions. The chair will draft language to address these issues keeping in mind the need to provide only essential information for uncertainty and accuracy for these sections. The following specific items in these sections were discussed:

- Calibration linearity may be an inappropriate term for calibrations with non-linear relationships. The terms "uncertainty" and "accuracy" were suggested but these terms will need definitions. "Goodness of fit" was suggested as a possible replacement term.
- Comments on requiring measured concentrations to be bracketed by calibration standards were reviewed. The committee agreed this requirement is necessary but suggested that there are ways of reporting concentrations outside the calibration standards when qualified by an appropriate reduced confidence interval. It was suggested that ten times the standard deviation be used rather that the value "3.18" currently used in section 5.9.4.3.d). The chair will develop revised language for this section.
- Numbering for items listed in Section 5.5.4.4 should be made consistent with corresponding items in Section 5.9.4.3.
- Concern for decaying instrument detector sensitivity and its effect on insuring sufficient instrument response to obtain a valid measurement was discussed. This issue may be addressed by the test method but some committee members favor a statement suggesting the instrument have sufficient response to get a valid reading.

# ACTION ITEMS QUALITY SYSTEMS COMMITTEE TELECONFERENCE AUGUST 19, 1998

Item No.	Action Item	Date to be Completed
1.	QS Committee will meet with EPA EMMC at WIC in Washington	8/25/98
2.	QS Committee teleconference	8/26/98
3.	QS Chair to draft replacement language for Sections 5.9.4.3 and 5.9.4.4	8/26/98
4.	Chair will explore facilities, availability and dates in November for a three day conference in Annapolis, MD to discuss detection limits and calibration issues.	8/26/98

# PARTICIPANTS QUALITY SYSTEMS COMMITTEE TELECONFERENCE AUGUST 19, 1998

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